

PRODUCT INFORMATION

PF-04859989 (hydrochloride)

Item No. 31383

CAS Registry No.: 177943-33-8

Formal Name: (3S)-3-amino-3,4-dihydro-1-hydroxy-2(1H)-quinolinone, monohydrochloride

MF: C₉H₁₀N₂O₂ • HCl

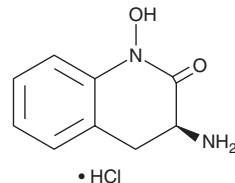
FW: 214.7

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PF-04859989 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the PF-04859989 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. PF-04859989 (hydrochloride) is soluble in DMSO. It is also soluble in water. The solubility of PF-04859989 (hydrochloride) in DMSO and water is approximately 22 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PF-04859989 is an inhibitor of kynureneine aminotransferase II (KAT II; IC₅₀s = 0.032 and 0.263 μM for the human and rat recombinant enzymes, respectively).¹ It is selective for KAT II over KAT I, -III, and -IV (IC₅₀s = 21.6, 107, and >50 μM, respectively). *In vivo*, PF-04859989 (10 mg/kg, s.c.) reduces basal striatum, prefrontal cortex, and hippocampus kynurenic acid levels in rats. It prevents ketamine- or amphetamine-induced disruption of auditory gating in rats, as well as prevents ketamine-induced deficits in spatial memory in non-human primates. PF-04859989 also inhibits glutamate oxaloacetate transaminase 1 (GOT1; IC₅₀ = 8 μM) and reduces the viability of PaTu 8988t and PaTu 8902 pancreatic cancer cells in a concentration-dependent manner.²

References

1. Kozak, R., Campbell, B.M., Strick, C.A., et al. Reduction of brain kynurenic acid improves cognitive function. *J. Neurosci.* **34**(32), 10592-10602 (2014).
2. Yoshida, T., Yamasaki, S., Kaneko, O., et al. A covalent small molecule inhibitor of glutamate-oxaloacetate transaminase 1 impairs pancreatic cancer growth. *Biochem. Biophys. Res. Commun.* **522**(3), 633-638 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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